Complete Summary

GUIDELINE TITLE

Methods and materials used in perineal repair.

BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). Methods and materials used in perineal repair. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2004 Jun. 8 p. (Guideline; no. 23). [43 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Perineal trauma (first- and second-degree perineal tears) sustained during childbirth

Note: This guideline does not cover the repair of third- and fourth-degree perineal tears, which is the subject of a separate guideline.

GUIDELINE CATEGORY

Management
Treatment

CLINICAL SPECIALTY

Family Practice
Obstetrics and Gynecology

INTENDED USERS

Advanced Practice Nurses
Nurses
Physicians

GUIDELINE OBJECTIVE(S)

To provide up-to-date information for medical and midwifery staff on the most effective methods and materials for use in the repair of perineal trauma sustained during childbirth

TARGET POPULATION

Women with perineal trauma sustained during childbirth

INTERVENTIONS AND PRACTICES CONSIDERED

Repair of Perineal Tears

1. Use of absorbable synthetic material (polyglycolic acid and polyglactin 910)
2. Suturing technique
    - Continuous subcuticular technique (vs. interrupted sutures)
    - Continuous non-locking suturing technique (vs. traditional interrupted method)
    - Two-layer (vs. three-layer technique)

Considered but not recommended: Non-suturing of first- and second-degree perineal tears

MAJOR OUTCOMES CONSIDERED

- Wound healing
- Wound gaping
- Pain and discomfort
- Analgesic use
- Suture dehiscence and resuturing
- Dyspareunia
- Suture removal

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Cochrane Library and the Cochrane Register of Controlled Trials were searched for relevant randomized controlled trials (RCTs), systematic reviews, and meta-analyses. A search of Medline and PubMed electronic databases from 1966 to 2003 was also carried out. The date of the last search was November 2003.

The databases were searched using the relevant Medical Subject Heading (MeSH" terms including all subheadings. This was combined with a keyword search using "human," "female," "childbirth," "episiotomy," "tear," "perineum," "perineum/surgery," "postpartum-period," "puerperium," "morbidity," "wound healing," "suture technique," "catgut/adverse effects," "catgut/use," "sutures," "biocompatible materials/use," "polyglycolic acid/adverse effects," "polyglactin 910/ adverse effects," "randomised controlled trials," and "meta-analysis."

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Ia: Evidence obtained from meta-analysis of randomised controlled trials

Ib: Evidence obtained from at least one randomised controlled trial

IIa: Evidence obtained from at least one well-designed controlled study without randomisation

IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study

III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The recommendations were graded according to the level of evidence upon which they were based. The grading scheme used was based on a scheme formulated by the Clinical Outcomes Group of the National Health Service (NHS) Executive.

Grade A - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence levels Ia, Ib)

Grade B - Requires the availability of well-conducted clinical studies but no randomised clinical trials on the topic of recommendations (evidence levels IIa, IIb, III)

Grade C - Requires evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (evidence level IV)

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Following discussion in the Guidelines and Audit Committee, each green-top guideline is formally peer reviewed. At the same time the draft guideline is published on the Royal College of Obstetricians and Gynaecologists (RCOG) website for further peer discussion before final publication.

The names of author(s) and nominated peer reviewers are included in the original guideline document.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

In addition to these evidence-based recommendations, the guideline development group also identifies points of best clinical practice in the original guideline document.

Levels of evidence (Ia-IV) and grading of recommendations (A-C) are defined at the end of the "Major Recommendations" field.

Non-Suturing

A - The practice of leaving first- and second-degree perineal tears unsutured is associated with poorer wound healing and nonsignificant differences in short-term discomfort.

Suture Material

A - The use of absorbable synthetic material (polyglycolic acid and polyglactin 910) for repair of perineal trauma is associated with less perineal pain, analgesic use, dehiscence, and resuturing, but increased suture removal, when compared with catgut.

A - The use of a more rapidly absorbed form of polyglactin 910 for repair of perineal trauma is associated with a significant reduction in pain and a reduction in suture removal when compared with standard absorbable synthetic material. In the light of current evidence, rapid-absorption polyglactin 910 is the most appropriate suture material for perineal repair.

Method of Repair

A - The use of a continuous subcuticular technique for perineal skin closure is associated with less short-term pain than techniques employing interrupted sutures.

A - A loose, continuous non-locking suturing technique used to appose each layer (vaginal tissue, perineal muscle and skin) is associated with less short-term pain compared with the traditional interrupted method.

A - The use of a two-layer procedure of perineal repair, where the skin is apposed but not sutured, is associated with an increase in wound gaping up to 10 days following birth but less dyspareunia at 3 months postpartum than a three-layer technique involving skin closure.

Principles of Repair

The following basic principles should be observed when performing perineal repairs.

- Suture as soon as possible following delivery to reduce bleeding and risk of infection.
- Check equipment and count swabs prior to commencing the procedure and count again following completion of the repair.
- Good lighting is essential to visualise and identify the structures involved.

- Ask for more experienced assistance if in doubt regarding the extent of trauma or structures involved.
- Difficult trauma should be repaired by an experienced operator in theatre under regional or general anaesthesia - insert an indwelling catheter for 24 hours to prevent urinary retention.
- Ensure good anatomical alignment of the wound and give consideration to cosmetic results.
- Rectal examination after completing the repair will ensure that suture material has not been accidentally inserted through the rectal mucosa.

Following completion of the repair, inform the woman regarding the extent of trauma and discuss pain relief, diet, hygiene, and the importance of pelvic-floor exercises.

Definitions:

Grading of Recommendations

Grade A - Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence levels Ia, Ib)

Grade B - Requires the availability of well-conducted clinical studies but no randomised clinical trials on the topic of recommendations (evidence levels IIa, IIb, III)

Grade C - Requires evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates an absence of directly applicable clinical studies of good quality (evidence level IV)

Levels of Evidence

Ia: Evidence obtained from of meta-analysis of randomised controlled trials

Ib: Evidence obtained from at least one randomised controlled trial

IIa: Evidence obtained from at least one well-designed controlled study without randomisation

IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study

III: Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV: Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for selected recommendations (see "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate management of perineal trauma associated with childbirth, which can reduce bleeding, reduce the risk of infection, and improve patient outcome

POTENTIAL HARMS

None stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Clinical guidelines are "systematically developed statements which assist clinicians and patients in making decisions about appropriate treatment for specific conditions." Each guideline is systematically developed using a standardised methodology. Exact details of this process can be found in Clinical Governance Advice No. 1: Guidance for the Development of Royal College of Obstetricians & Gynaecologists (RCOG) Green-top Guidelines.
- These recommendations are not intended to dictate an exclusive course of management or treatment. They must be evaluated with reference to individual patient needs, resources and limitations unique to the institution and variations in local populations. It is hoped that this process of local ownership will help to incorporate these guidelines into routine practice. Attention is drawn to areas of clinical uncertainty where further research may be indicated.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Audit Criteria/Indicators

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Royal College of Obstetricians and Gynaecologists (RCOG). Methods and materials used in perineal repair. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2004 Jun. 8 p. (Guideline; no. 23). [43 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 Jan (revised 2004 Jun)

GUIDELINE DEVELOPER(S)

Royal College of Obstetricians and Gynaecologists - Medical Specialty Society

SOURCE(S) OF FUNDING

Royal College of Obstetricians and Gynaecologists

GUIDELINE COMMITTEE

Guidelines and Audit Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee Members: Professor Deirdre J Murphy, MRCOG (Chair); Lizzy Dijeh (Secretary); Ms Toni Belfield, Consumers' Representative; Professor P R Braude, FRCOG, Chairman, Scientific Advisory Committee; Mrs C Dhillon, Head of Clinical Governance and Standards Dept.; Dr Martin Dougherty, A. Director NCC-WCH; Miss L M M Duley, FRCOG, Chairman, Patient Information Subgroup; Mr Alan S Evans, FRCOG; Dr Mehmet R Gazvani, MRCOG; Dr Rhona G Hughes, FRCOG; Mr Anthony J Kelly MRCOG; Dr Gwyneth Lewis, FRCOG, Department of Health; Dr Mary A C Macintosh, MRCOG, CEMACH; Dr Tahir A Mahmood, FRCOG; Mrs

Caroline E Overton, MRCOG, Reproductive medicine; Dr David Parkin, FRCOG; Oncology; Ms Wendy Riches, NICE; Mr Mark C Slack, MRCOG, Urogynaecology; Mr Stephen A Walkinshaw, FRCOG, Maternal and Fetal Medicine; Dr Eleni Mavrides, Trainees Representative

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Guideline authors are required to complete a "declaration of interests" form.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Print copies: Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Bookshop, 27 Sussex Place, Regent's Park, London NW1 4RG; Telephone: +44 020 7772 6276; Fax, +44 020 7772 5991; e-mail: bookshop@rcog.org.uk. A listing and order form are available from the RCOG Web site.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Guidance for the development of RCOG green-top guidelines. Clinical Governance Advice No 1. 2000 Jan. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.
- Searching for evidence. 2001 Oct. Available from the Royal College of Obstetricians and Gynaecologists (RCOG) Web site.

Additionally, Audit Criteria are included in section 11 in the original guideline document.

PATIENT RESOURCES

None available

NGC STATUS

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